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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AMRANY, ADI	
ART UNIT	PAPER NUMBER
2836	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/788,962	LASALANDRA ET AL.	
	Examiner	Art Unit	
	ADI AMRANY	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24 and 28-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24 and 28-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on October 16, 2009, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Jared J. Fureman/

Supervisory Patent Examiner, Art Unit 2836

Response to Arguments

Applicant's arguments made in the Appeal Brief have been considered and are persuasive and, therefore, the finality of that action is withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of applicants' admitted prior art ("APA"; specification, pages 1-3) and Shimizu (US 2003/0092493)

Applicants state that "the preferred embodiment is directed to a device and method for use with a portable electronic apparatus" (Brief, page 17, last 4 lines). The Woehrl vehicle is portable and the circuitry to triggering the air bag is electrical. Therefore, the reference (although directed towards a different art) meets the intended use limitation of "for use with a portable electronic apparatus."

Applicants next argue that none of the references provided during prosecution provide "reactivation signals for activating a device from standby, or to portable electronic devices that include such devices" (Brief, top of page 18). It is respectfully noted that none of independent claims 1, 10, 21, 28 or 29 recite these limitations. Only claim 9 uses the term "reactivation signal." The other claims recite "recognition signal" and do not positively indicate any use for that signal.

The Examiner agrees with applicants' description of Woehrl (Brief, pages 18-23). Reference signal generators (11, 11') remove low value positive signals and all negative signals from the circuitry. Therefore, the threshold circuits (41-43, 41'-43', 51-53 and 51'-53') only respond to positive acceleration signals. It is believed that the disagreement regarding Woehrl is a result of the interpretation of the output of OR gate 44 (L3) as the claimed recognition signal.

Applicants state that "a high signal from the OR gate 44 cannot, itself, provoke a trigger signal" (Brief, top of page 21). First, it is respectfully noted that none of the claims use the term "trigger signal." Claims 1, 10, 21 and 28-29 use the term

"recognition signal" and the claims do not recite that this signal completes any function. The claims do not positively recite that the recognition signal is the signal that activates a portable electronic apparatus that was in a standby state. Claim 9 simply changes the term "recognition" to "reactivation", but does not add any description for use of the signal. Only claim 13 provides any indication that the device returns to an active state when a first recognition signal is produced. The Woehrl L3 signal meets the claimed limitations regarding how the signal is created. It does not matter that Woehrl describes additional logic gates (fig 2b), because the claims do not recite a use for the recognition/reactivation signal.

Second, Woehrl discloses that the L3 signal is sufficient, by itself, to trigger the airbags (col. 8, line 60 to col. 9, line 1). Woehrl uses the AND gates (81, 81') to combine four additional signals (L1, L2, L4, L5) with the front impact sensor signal (L3) so that any one of the four signals (L1, L2, L4, L5) can override the recognition signal (L3)(see col. 9). The signals (L1, L2, L4, L5) are outputs of validating or recognizing circuits. They determine if the acceleration event detected at L3 is really a minor bump, a rear-end collision or some other event that does not warrant triggering the airbag. Thus, it is proper to interpret Woehrl L3 as the recognition signal, and it would be obvious to one skilled in the art to label L3 as a trigger signal as well.

Regarding claim 1, applicants' arguments regarding the absolute value have been considered and are persuasive. A new rejection in view of Woehrl and APA is provided below. APA discloses that it is known to use MEMS inertial sensors to provide a recognition signal in response to components of force (i.e. absolute value of

acceleration signals). As stated by the applicants, the limitations of the known prior art is that only one threshold is used for two sensors. An event may trigger the component of force to exceed the threshold, but since the X and Y components of acceleration do not breach the threshold, a recognition signal is not created (fig 1). Woehrl provides the teachings missing from applicants' APA; that it is known to use two different thresholds to provide a recognition signal. Specifically, Woehrl discloses an OR gate for a high threshold and an AND gate for a low threshold. Woehrl discloses detecting movement in only one direction (+A2 and +A3) to create the recognition signal (L3). By combining the circuitry of Woehrl with the components of force disclosed in APA, one skilled in the art would construct an inertial sensor that detects acceleration events against two thresholds in both the positive and negative acceleration directions.

Woehrl discloses that L3 is created when positive signals exceed one of two thresholds. Based on the combination with APA, one skilled in the art would be motivated to either:1) duplicate the Woehrl circuitry for also comparing negative signals against the same thresholds (in this case, OR gate 44 would have 4 inputs); or 2) not remove the negative component of acceleration in the first place. By keeping the negative acceleration, the magnitude of acceleration (in either direction) determines L3. This is possible because triggering an airbag is an end use of the Woehrl circuitry. Detecting acceleration is not limited to airbags. One skilled in the art would recognize that detecting angled impacts would have practical uses beyond detecting only front impacts (which includes disqualifying rear impacts, as discussed above).

Regarding claim 31, the combination of claims 1 and 31 do not recite that there is any circuit/device that receives the recognition signal. Therefore, the boundaries of what constitutes the “output" of the Woehrl device would be obvious. The Examiner agrees that labeling the output of OR gate 44 as the output would mean that the remaining logic gates of figure 2b are outside of “the device.” But this interpretation does not mean that those logic gates are not part of another device that is placed next to the first device and that the two devices work together as designed. As discussed above, the signal produced at L3 is sufficient, by itself, to trigger the airbag, thereby providing additional motivation to label it as the output of the device.

Applicants state that “one of ordinary skill in the art would recognize that the output terminal of the circuit is the position from which an activation or recognition signal is provided" (Brief, bottom of page 29). First, the claims do not recite an activation signal. Second, the term recognition signal is not defined in the claim, as the signal has no purpose or use. Lastly, the claims do not recite any device that would ever receive the signal.

Regarding claim 9, renaming the “recognition signal” as the “reactivation signal” does not, by itself, change the scope or meaning of the term. The claim does not define where the signal goes or what it does. Applicants’ specification does not provide any support for the interpretation that the provided recognition signal can have two different functions. Therefore, changing the name of the signal is interpreted as an obvious design choice.

Regarding claims 9-10, the limitation of "correlated to an absolute value" overcomes Woehrl. As discussed above, the limitation is obvious in view of APA.

Claim 13 is the only claim which positively recites the function of the portable electronic device (goes to sleep, reactivates) and that the recognition signal is responsible for waking up the device. Shimizu discloses that it is known to configure a device to enter standby after a period of inactivity and to use acceleration sensors to reactivate the device. It is also respectfully noted that the claims are given their broadest reasonable interpretation in view of the specification (Brief, page 35, lines 15-16). The specification cannot be ignored when determining the scope of the claims. Regardless, applicants cannot ask the Examiner to not read limitations within the specification into the claims, then base their arguments on precisely that (see for example, Brief, page 36, lines 6-7).

Regarding claim 15, Woehrl discloses subtracting a reference value (11, 11') from the acceleration signal. The reference value does not change ("static") and it is an acceleration reference signal. Therefore, Woehrl meets the recited limitations. There is nothing in the claim to suggest that the term "static" is in contrast to a dynamic acceleration signal. Woehrl meets the broad limitations of the claim.

Regarding claim 17, it was the Examiner's intention that the interpretation of combining the transduction circuits would mean removing one and operate the remaining one to pass the acceleration signals sequentially.

Regarding claim 21, new reference Shimizu discloses deactivation a device and then reactivating the device, as discussed above.

Regarding claims 28-29, the limitation of absolute value has been address, as discussed above.

Regarding claim 8, The Woehrl filter (9), subtraction node (10) and switches (41, 51) meet the functional limitation of "and supplies at least one of said respective acceleration signals" (end of claim 8). The claim does not recite that the rectifier provides the absolute value. Regardless, Woehrl discloses that it is known to use inverters (61, 61') to make negative values positive so they can be passed through logic gates.

Regarding claim 19 (and 20), the limitations are drawn towards the end use of the circuitry. One skilled in the art would be able to configure the combined Woehrl and APA teachings to any electronic device that needs to be reactivated. Applicants have provided no proof for their assertion that at the time of filing cell phones were not known to include elements that could be instantly placed in a condition to better protect them from impact, except to say that they were not. This argument is not persuasive.

Lastly, it is again noted that one skilled in the art would understand that "a recognition signal" would be generated in response to an event. To recognize an event is to be aware of it after it has happened. It does not indicate creating, generating or activating any future event. The ordinary meaning of the word, "recognize" does not indicate anything that has to do with operating or triggering some action in another device. Recognition, as in claims 1, 10, 13, 21, 25 and 28-29, is not the same as reactivation (see claim 9).

Claim Objections

1. Claim 9 is objected to because the first 4 lines of the claim are unclear and confusing. The are four components initially claims. 1) portable electronic apparatus; 2) a device for reactivation from stand-by, 3) a multidirectional inertial device, and 4) an output terminal.

First, it appears that the “device for reactivation from stand-by” is the portable electronic apparatus. Clarification is requested regarding why they are listed as two different components (see fig 5, item 30).

Second, the claim recites the limitation of "an output terminal of the device for reactivation from standby." This phrase does not properly indicate which “device.” There are two claimed devices in the previous two lines. It would appear that the output terminal should be located within the multidirectional inertial device.

Third, the claim appears to recite that the multidirectional inertial device is also reactivated from standby (line 4).

Applicants are suggested to begin claim 9 with the following, “A portable electronic apparatus for reactivation from standby, comprising: a multidirectional inertial device that includes: an output terminal for providing a reactivation signal to the portable electronic apparatus..."

2. Claim 13 is objected to because the claim incorrectly recites that the output terminal is part of the portable electronic apparatus. The output terminal, where the recognition signal is provided, is part of the logic circuit. Or output should be changed to input.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 10-12 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woehrl (US 5,173,614) in view of applicants' admitted prior art ("APA"; specification, pages 1-3).

With respect to claim 1, Woehrl discloses a multidirectional inertial device (fig 2a-2b; col. 4-5 and 7) having a plurality of detection axes (fig 1) comprising:

inertial sensor means (2, 3), transduction means (7-10, 7'-10') coupled to said inertial sensor means and supplying a plurality of acceleration signals (output of 10, 10'), each of which is correlated to an acceleration parallel to a respective axes;

first comparison means (41-43, 41'-42') connected to said transduction means and supplying a first recognition signal (L3) when only a first and only a second of said acceleration signals is greater than a respective upper threshold (S5); and

second comparison means (51-53, 51'-52') connected to said transduction means and for supplying said first recognition signal (L3) when any two signals are greater than a respective lower threshold (Sa4).

Woehrl discloses that the recognition signal is generated when either: 1) a first OR gate (52) senses that only a first/second acceleration signal is above a first threshold; or 2) an AND gate (43) senses that both first/second acceleration signals are above a second threshold. Woehrl does not expressly disclose the second threshold (Sa4) is smaller than the first threshold (Sa5). Woehrl discloses that the thresholds can be selected to any value which would properly indicate a vehicle crash (col. 7, lines 24-30). At the time of the invention by applicants, it would have been obvious to one skilled in the art to select the Woehrl threshold values such that Sa4 is lower (smaller) than Sa5, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Woehrl does not expressly disclose using absolute values of the acceleration signals. As stated above, Woehrl discloses that low and negative acceleration values are filtered (9) and/or removed (10). APA discloses that it is known to use a multidirectional inertial device to supply a recognition signal when the components of force according to a sensor direction exceeds a predetermined threshold (page 1, lines 7-11).

Woehrl provides a recognition signal at L3 based on the sensed values of acceleration sensors. Although Woehrl discloses sending the signal to an airbag system, it would be obvious that the Woehrl recognition signal could be applied to any desired electronic device that is based on acceleration sensors. Woehrl and APA are analogous because they are from the same field of endeavor, namely multidirectional

inertial devices. At the time of the invention by applicants, it would have been obvious to combine the threshold levels disclosed in Woehrl with the components of force disclosed in APA. The motivation for doing so would be to detect angled impacts in both sensor directions.

Since Woehrl uses the acceleration sensors to trip an airbag, negative acceleration signals are used to verify the angle of collision and prevent airbag deployment (via 81, 81'; see col. 9). Combining Woehrl with another electronic device would remove the need to prevent providing the recognition signal in the event of a rear impact. Therefore, it would be obvious to either 1) forward all signals (positive and negative) to the Woehrl limit switches (41-42, 51-52) or 2) duplicate the limit switches to also compare negative sensor values against negative threshold levels (in which case OR gate 44 would have four inputs).

With respect to claim 2, Woehrl discloses the first comparison means comprises, for each axis a respective first comparator (51, 51'), which receives the respective one of said upper thresholds (Sa5) and receives the respective one of said acceleration signals, and at least one first logic gate (52), connected to each first comparator.

With respect to claim 3, Woehrl discloses the second comparison means comprises, for each axis, a respective second comparator (41, 41'), which receives the respective one of said lower thresholds (Sa4) and receives the respective one of said acceleration signals, and at least one second logic gate (43) connected to each comparator.

With respect to claim 4, Woehrl discloses the Sa5 thresholds and the Sa4 thresholds are equal to each other, as indicated by the fact that they contain the same designation.

With respect to claim 5, it would have been obvious to set the threshold ratio to $1/\sqrt{2}$, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *Id.*

With respect to claims 10-12, Woehrl and APA disclose the apparatus necessary to complete the recite method, as discussed above in the rejection of claims 1 and 4-5, respectively.

With respect to claims 28-30, Woehrl discloses a device and corresponding method comprising an acceleration circuit (2, 3), a comparator (7-20, 41-43, 51-53) and a logic circuit (43, 53, 44), as discussed above. APA discloses that it is known to use absolute values of acceleration sensors to compute movement in both directions. Woehrl discloses the step of producing the selected logic value if the level of the acceleration with respect to only the first/second axes exceeds the high threshold comprises producing the selected logic value at an output terminal (output of 44); and the step of producing the selected logic value if the level of acceleration with respect to any two axes exceeds the low threshold comprises producing the selected logic value at the output terminal (col.7 , lines 18-49).

With respect to claim 31, it would be obvious to label the output of logic gate (44) is the output of the inertial device. *Id.* Woehrl disclose that the L3 signal is capable, by itself, of triggering the airbag. But because of the possibility of rear impacts or minor

bumps, it would be beneficial to add logic gates to prevent L3 from triggering the air bag unless only a front impact is sensed (col. 9). Therefore, Woehrl provides the motivation for labeling the output of OR gate 44 as the output of the device.

Further, as discussed above, just because the output of 44 is the output of "the device" does not disqualify the remaining logic gates from being part of "another device", where to two devices operate side by side.

5. Claims 6-8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woehrl in view of APA and Oguchi (US 2002/0033047).

With respect to claims 6-7 and 16, Woehrl discloses an inertial sensor means for each of said preferential detection axes, does not expressly disclose said inertial sensor means comprise at least one micro-electro-mechanical sensor with capacitive unbalancing. APA discloses that it is known to use MEMS in inertial sensors. And Oguchi discloses an acceleration sensor comprising a micro-electromechanical sensor with capacitive unbalancing (fig 2; par 41-42).

Woehrl, APA and Oguchi are analogous because they are from the same field of endeavor, namely acceleration force sensors. At the time of the invention by applicants, it would have been obvious to a person of ordinary skill in the art to combine the multidirectional inertial device disclosed in Woehrl with the micro-electromechanical sensor with capacitive unbalancing disclosed in Oguchi, in order to use a force sensor with a moveable portion that naturally returns to its original position and can continually operate without constant recalibration.

With respect to claim 8, Woehrl discloses the transduction means comprises a current to voltage converter (2), a filter (8); and a rectifier (9-11, 41, 51). The Woehrl sensor outputs a voltage signal to the filter. It would be obvious to one skilled in the art to include a I/V converter (a resistor) in a system that uses a inertial sensor means that outputs a current signal in order to convert the signal acceptable to input into the filter. Further, the subtractor node would be obvious to one skilled in the art since the output of the Woehrl filter is equivalent to subtracting the output of an oppositely biased filter (band-pass vs. band-gap) from the original signal. The Woehrl rectifier accomplishes the tasks recited in the claim and therefore meets the recited limitation.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woehrl in view of APA and Shimizu (US 2003/0092493).

Woehrl discloses a portable electronic apparatus (vehicle) comprising a device for activation (airbag), said device including a multidirectional inertial device, as discussed above in the rejection of claim 1. APA discloses the acceleration signals are correlated to absolute values of acceleration. Claim 9 differs from claim 1 by changing the name of the recognition signal to reactivation signal. Merely changing the name of a signal does not have an effect on what that signal does.

It is noted that claim 9 does not require supplying the reactivation signal to the electronic apparatus.

Woehrl discloses that the device that receives the reactivation signal is an airbag. As discussed in applicants' Brief, an airbag only deploys once and it does not "reactivate." Shimizu discloses a portable electronic apparatus that receives a signal for

reactivation from stand-by (par 55-58). Woehrl, APA and Shimizu are analogous because they are from the same field of endeavor, namely acceleration sensors. At the time of the invention by applicants, it would have been obvious to provide the recognition signal disclosed by Woehrl and APA with the portable electronic apparatus disclosed in Shimizu, since the application of where to send the recognition signal is interpreted as the end use of the signal. Woehrl discloses how to create the signal based on different threshold values and Shimizu discloses that it is known to use an acceleration-based signal to reactivate a device from standby.

7. Claims 13-15, 17-18 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woehrl in view of Shimizu.

With respect to claim 13, Woehrl discloses a device comprising an acceleration circuit (2, 3,); a comparator circuit (41, 41', 51, 51'); and a logic circuit (43-44, 52), as discussed above in the rejection of claim 1. Shimizu discloses supplying the acceleration-based signal to a portable electronic device configured to go into stand-by after a period of inactivity and to return to an active state when a signal is provide at an output terminal (par 55-58). Woehrl and Shimizu are analogous, as discussed above in the rejection of claim 9. Claim 13 does not recite using absolute values of the acceleration signals, and therefore, the rejection is not based on APA.

With respect to claim 14, Woehrl discloses a sensor in each detection axes (2, 3); and a transduction circuit (7-11, 7'-11') for each axes to produce the dynamic acceleration signal.

With respect to claim 15, Woehrl discloses a summing junction (10) where a reference value ("static") of acceleration is combined with the filtered signal. At the time of the invention by applicant, it would have been obvious to one skilled in the art that subtracting a negative number is identical to adding a reference value, as taught by Woehrl.

With respect to claim 17, Woehrl discloses two transduction circuits. At the time of the invention by applicants, it would have been obvious to combine the transduction circuits into one circuit (by removing one and passing both signals through the other one) that sequentially outputs the acceleration signals, since it has been held that forming in one piece an article which has formerly been in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

With respect to claim 18, Woehrl discloses two axes (A2, A3).

With respect to claims 21-24, Woehrl discloses the apparatus necessary to complete the recite method, as discussed above in the rejection of claim 13 and that the detection axes are at right angles (orthogonal and perpendicular) to each other (col. 4, lines 66-67).

8. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woehrl, in view of Shimizu and Ishiyama (US 6,738,214).

Ishiyama discloses a device comprising an acceleration circuit configured to produce a dynamic acceleration signal corresponding to a level of acceleration on each of a plurality of detection axes, where the device further comprises a portable computer

(col. 3, line 11 to col. 4, line 6). The Ishiyama acceleration sensor detects when the device is falling and shuts off sensitive internal components. Further, it would have been obvious to a person of ordinary skill in the art to provide the recognition signal to a cell phone. The limitations of a portable computer and cell phone are interpreted as being drawn towards the end use of the device.

Woehrl, Shimizu and Ishiyama are analogous because they are from the same field of endeavor, namely acceleration detection circuits. At the time of the invention by applicants it would have been obvious to configure the device disclosed in Woehrl or Shimizu as the portable computer disclosed in Ishiyama or a cell phone, since this limitation is drawn to the end use of the acceleration circuit. One skilled in the art would recognize the advantages of placing the sensors in any electronic device that would experience acceleration.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited in the enclosed list disclose known types of acceleration sensors, including those used to reactivate a device from standby.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADI AMRANY whose telephone number is (571)272-0415. The examiner can normally be reached on Mon-Thurs, from 10am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on (571) 272-2800 x36. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AA

/Jared J. Fureman/
Supervisory Patent Examiner, Art Unit 2836

12/11/2009